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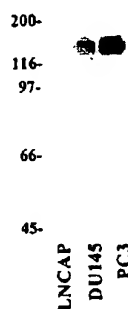
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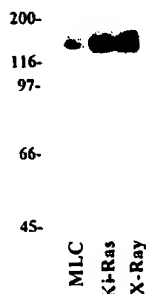
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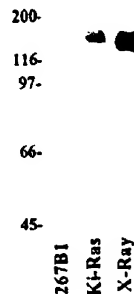
(54) Title: ANTI-EPHA2 ANTIBODIES AS A CANCER DIAGNOSTIC



A



B



C

(57) Abstract: Method and kits are provided for the detection and diagnosis of metastatic disease. More particularly, the methods and kits employ compounds that can detect EphA2, a specific epithelial cell tyrosine kinase that is overexpressed in metastatic tumor cells. In one embodiment the compound is an antibody capable of binding to an epitope of EphA2.

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INTERNATIONAL SEARCH REPORT

Int l Application No
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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/574

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WALKER-DANIELS J ET AL: "Overexpression of the EphA2 tyrosine kinase in prostate cancer." PROSTATE, vol. 41, no. 4, 1 December 1999 (1999-12-01), pages 275-280, XP000978523 ISSN: 0270-4137 the whole document --- -/--	1-27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZANTEK NICOLE DODGE ET AL: "Identification of an adhesion-associated tyrosine kinase that is tightly regulated in breast cancer." MOLECULAR BIOLOGY OF THE CELL, vol. 8, no. SUPPL., November 1997 (1997-11), page 134A XP000979706 37th Annual Meeting of the American Society for Cell Biology; Washington, D.C., USA; December 13-17, 1997 ISSN: 1059-1524 abstract	1-27
X	--- ZANTEK NICOLE DODGE ET AL: "Epithelial cell kinase (ECK/EPHA2) regulation in breast cancer." MOLECULAR BIOLOGY OF THE CELL, vol. 9, no. SUPPL., November 1998 (1998-11), page 134A XP000980380 38th Annual Meeting of the American Society for Cell Biology; San Francisco, California, USA; December 12-16, 1998 ISSN: 1059-1524 the whole document	1-27
X	--- ZANTEK N D ET AL: "Regulation of the EphA2 receptor tyrosine kinase by estrogen and myc." PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH ANNUAL, vol. 40, March 1999 (1999-03), page 687 XP000978765 90th Annual Meeting of the American Association for Cancer Research; Philadelphia, Pennsylvania, USA; April 10-14, 1999, March, 1999 ISSN: 0197-016X abstract	1-27
X	--- KINCH MICHAEL S ET AL: "Identification of tyrosine phosphorylated adhesion proteins in human cancer cells." HYBRIDOMA, vol. 17, no. 3, June 1998 (1998-06), pages 227-235, XP000980398 ISSN: 0272-457X the whole document	1-27
X	--- US 5 457 048 A (PASQUALE ELENA B ET AL) 10 October 1995 (1995-10-10) the whole document -----	1-27

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 17-20

Claim 17 relates to an antibody defined by reference to a desirable characteristic or property, namely being produced by the method of claim 14.

Claims 18-20 relate to an antibody defined by reference to a desirable characteristic or property, namely specifically binding to an intracellular epitope of EphA2.

The claims cover all antibodies having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT only for antibodies produced by the D7 hybridoma.

In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the subject-matter for which protection is sought in claims 17-20 is impossible. Consequently, a search has been performed on D7 antibody.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

Information on patent family members

PCT/US 00/22669

Form PCT/ISA/210 (patent family annex) (July 1992)